DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027555
Date Inspected: 05-May-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Job Site

CWI Name:	As noted below			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

12E PP109.5 E2-TS (Interior)

This QA Inspector made a random observation of the ongoing production welding of the Transverse Stiffener (TS) of the Deck Access hole (DAH) located at 12E PP109.5 E2 on the interior of the OBG. ABF welder Todd Jackson (ID 4639) was observed performing the Shielded metal Arc Welding (SMAW) in the 3G vertical position utilizing E7018-H4R electrodes drawing and amperage of 125. QC Inspector John Pagliero was present to monitor the welding and the parameters as they pertained to ABF-WPS-D1.5-F1200A. On a subsequent observation the work on the 7/16” fillet welds was in progress and between passes, the welder was noted as cleaning the work by employing a small disc grinder to grind and blend the work for a smooth transition. This QA Inspector noted that no issues had arisen and the work had been completed on this date. A visual inspection of the work was performed by the QC Inspector and the QA Inspector noted that the work at this location appeared to be in general conformance with the contract documents.

13W PP122.2-124.7 W2.8 (Exterior)

This QA Inspector observed QC Inspector John Pagliero verify prior to the start of the fillet weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterword’s verified that the

welding parameters (Amps and Travel Speed) were in accordance with ABF-WPS-D1.5-1040C-CU using E7018 3.2mm diameter electrodes drawing amperage of 135. This QA Inspector observed ABF welder Steve Davis (ID 7889) performing the root and fill pass weld operation per the SMAW process in the (1G) flat position on the (top side) of the Deck Plate Drop-in Section on Segment 13W along Grid Line W2.8 from y+6000mm to y+12500mm. The welder was observed cleaning the start/stop edges of the work with a small disc grinder and compressed air between passes as the QC Inspector measured the inter-pass temperatures. This QA Inspector observed that Mr. Davis was in-process on the root and fill pass weld operation at the end of this QA Inspectors' shift and appeared to be in general conformance with the contract specifications. This QA Inspector observed ABF welder Khit Lounechaney (ID 4985) performing the root and fill pass weld operation per the SMAW process in the (1G) flat position on the (top side) of the Deck Plate Drop-in Section on Segment 13W along PP121.2 at y+100mm to y+6000mm. This QA Inspector observed QC Inspector John Pagliero verify prior to the start of the root and fill pass weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterword's verified that the welding parameters (Amps and Travel Speed) were in accordance with WPS D1. 5-1040C-CU Revision 0 using E7018 3.2mm diameter electrodes. This QA Inspector noted that for both welders the 3.2mm electrodes were stored in electrically heated, thermostatically controlled oven after removal from the sealed containers. The exposure limits of the electrodes appeared to comply with the minimum storage oven temperature of 120 degrees Celsius as per the contract documents. The welding parameters and surface temperatures were verified by the QC inspector's utilizing a Fluke 337 clamp meter to measure the electrical welding parameters and Tempilstik Heat Indicators for verifying the preheat and inter-pass temperatures. This QA Inspector made subsequent observations to monitor quality and noted that the production welding by Mr. Davis was in progress at y+6000mm to 12500mm and for Mr. Lounechaney at y+100mm to y+6000mm, was in progress as well. The work at the W2.8 line appeared to be in general conformance with the contract documents.

13W PP118.2 W5-PS-5 (Exterior)

This QA Inspector made random observations of ABF welder Eric Sparks (ID 3040) performing the SMAW process in the 2F horizontal position on PS-5 angle brackets to "A" deck at 13W PP118.2 W5 on the exterior of the OBG. The 6mm fillet welds were observed to be in the all-around length of the brackets and QC Inspector John Pagliero was present to perform a Visual Inspection (VT) of the work upon completion at each location. This QA Inspector observed QC Inspector John Pagliero verify prior to the start of the fillet weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterword's verified that the welding parameters (Amps and Travel Speed) were in accordance with ABF-WPS-D1.5-F1200A using E7018 3.2mm diameter electrodes drawing amperage of 128. On subsequent observations, further locations that were completed were recorded as; 13W PP119.2, PP120.5, PP121.5, PP122.5 and PP 123.5. At PP 124.5, no welding was performed due to a pending RFI. The completed work at these locations was found to be in general conformance with the contract specifications.

Summary of Conversations:

There were no pertinent conversations today.

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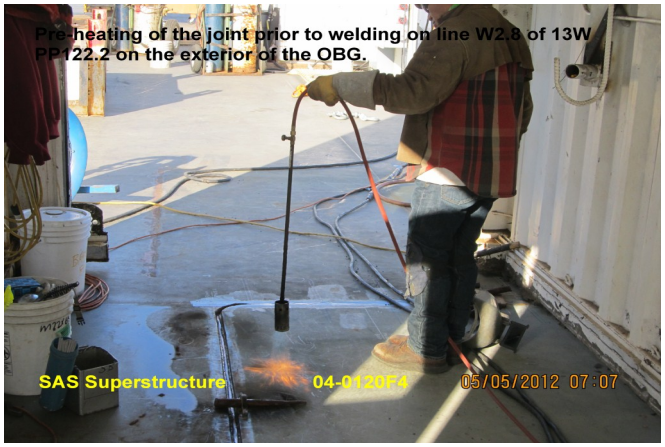

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910 , who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer